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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,009	04/08/2004	Hyung Sun Kim	46500-000572/US	7534
30593	7590	12/24/2009	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			CHIO, TAT CHI	
P.O. BOX 8910			ART UNIT	PAPER NUMBER
RESTON, VA 20195			2621	
			MAIL DATE	DELIVERY MODE
			12/24/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/820,009	<b>Applicant(s)</b> KIM ET AL.	
	<b>Examiner</b> TAT CHIO	<b>Art Unit</b> 2621	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,6,8-15,17-20,22-24,26-28 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,8-15,17-20,22-24,26-28 and 30-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/29/2009, 10/29/2009, and 12/1/2009</u> .                    | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/29/2009 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-4, 6, 8-15, 17-20, 22-24, 26-28, and 30-32 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-4, 6, and 8-11 are rejected under 35 U.S.C. 101 because in the state of the art, transitory signals are commonplace as a medium for transmitting computer instruction and thus, in the absence of any evidence to the contrary and given the broadest reasonable interpretation, the scope of a "computer readable medium" covers a signal per se.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2621

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 8, 9, 12-15, 17-20, 22-24, 26-28, and 30-32 are rejected under 35

U.S.C. 103(a) as being unpatentable over Nonomura et al. (6,046,778) in view of

Werner (US 2001/00130710 A1).

3. **Consider claims 1, 12, 13, 14, and 15**, Nonomura teaches a computer-readable medium encoded with a computer executable data structure for managing reproduction of a text subtitle data by a reproducing apparatus, comprising: a data area storing a text subtitle stream including at least a first segment and a second segment (8, 10 and 11 of Fig. 1), the first segment including global style information, and the second segment including text subtitle data and local style information (col. 5, lines 47-52), , the global style information providing at least one of composition information and rendering information for an overall region including text subtitle data (col. 5, lines 47-52), and the local style information providing at least one font information for the text subtitle data for managing reproduction by the reproducing apparatus (col. 6, lines 22-38), wherein the global style information included in the first segment is separate from the text subtitle data included in the second segment (Fig. 1), but Nonomura does not explicitly teach the second segment including an identifier identifying the second segment and being linked to the first segment, and the local style information forms a group with the text subtitle data in the second segment, and the local style information provides the font information for the text subtitle data recorded sequentially after the local style information.

Werner teaches the second segment including an identifier identifying the second segment and being linked to the first segment ([0035]), and the local style information forms a group with the text subtitle data in the second segment ([0039] and Fig. 3), and the local style information provides the font information for the text subtitle data recorded sequentially after the local style information (Fig. 2 and Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an identifier in the invention taught by Nonomura to keep track of selected caption packets.

**Consider claims 2, 18, 22, 26, and 30**, Nonomura teaches the computer-readable medium, wherein the composition information includes position information for positioning a text subtitle represented by the text subtitle data on a display (Fig. 12).

**Consider claims 3, 19, 23, 27, and 31**, Nonomura teaches the computer-readable medium, wherein the rendering information includes a display effect of the text subtitle data (Fig. 9).

**Consider claim 6**, Werner teaches the computer-readable medium, wherein the font information includes at least one of a font, font size and a font style ([0039]).

**Consider claim 8**, Nonomura teaches the computer-readable medium, wherein the text subtitle data includes at least one text string (it is well-known in the art that subtitle data includes at least one text string).

**Consider claims 9, 20, 24, 28, and 32**, Werner teaches the computer-readable medium, wherein the local style information is stored in association with the portion of

the text subtitle data for which the local style information provides the font information (Fig. 2 and Fig. 3).

**Consider claim 4**, Nonomura further teach the computer-readable medium, wherein the global style information includes the composition information and the rendering information (Fig. 12 and Fig. 9).

**Consider claim 17**, Nonomura teaches the method, wherein the text subtitle stream further includes global style information providing at least one of composition information and rendering information (col. 5, lines 47-52).

1. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nonomura et al. (6,046,778) in view of Werner (US 2001/00130710 A1) as applied to claim 1 above, and further in view of Kashima (US 2002/0087999 A1).

**Consider claim 10**, Nonomura and Werner teach all the limitations in claim 1 but fail to teach the computer-readable medium, wherein the text subtitle stream is stored as at least one packetized elementary stream.

Kashima teaches the recording medium, wherein the text subtitle stream is stored as at least one packetized elementary stream (Fig. 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store the text subtitle stream as packetized elementary stream to facilitate efficient transmission using MPEG 2.

**Consider claim 11**, Kashima further teaches the computer-readable medium, wherein the text subtitle stream is stored as a plurality of transport packets ([0024]).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAT CHIO whose telephone number is (571)272-9563. The examiner can normally be reached on Monday - Thursday 9:00 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Q. Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. C. C./  
Examiner, Art Unit 2621

/Thai Tran/  
Supervisory Patent Examiner, Art Unit 2621